Tillman and Martinsen, 1987 Data Set 67

Reference: Tillman, R.W., and R.S. Martinsen, 1987, Sedimentologic model and production characteristics of Hartzog Draw field, Wyoming, a Shannon shelf-ridge sandstone: in Tillman, R.W. and Weber, K.J., eds, Reservoir Sedimentology, Society of Economic Paleontologists and Mineralogists Special Publication No. 40, p. 15-112.

Author's affiliation: Cities Service Oil and Gas Company

Age: Late Cretaceous (Campanian)

Formation: Shannon Sandstone Member of Cody Shale

Location: Hartzog Draw Field, east flank of Powder River Basin, Wyoming

Wells: Federal AS-1, Federal AE-1, and Bud Christensen 2

Depth range: 9,143-9,503 feet

Depositional environment: marine sandstones completely enveloped in marine shale.

Lithology and Facies: the authors define nine facies, and provide permeability and porosity data for six of the facies:

Facies	Lithology	Reservoir Potential
Central-Ridge	fine to medium-grained quartzose sandstone, moderately glauconitic; rare siderite clasts and shale rip-up clasts.	excellent
Central-Ridge (planar laminated)	fine to medium grained quartzose sandstone.	limited?
High-Energy Ridge-Margin	predominantly medium grained sandstone, abundant shale and limonite rip-up clasts and lenses, commonly very glauconitic.	good
Low-Energy Ridge-Margin	Fine-grained sandstone with only rare shale interbeds. Fewer clasts and lenses and less glauconitic than High-Energy Ridge-Margin Facies.	moderate to good
Inter-Ridge	Thinly interbedded fine to very fine-grained silty sandstone and silty shale, slightly glauconitic.	moderate to locally high
Bioturbated Shelf-Siltstone	Shaly, slightly sandy dark gray siltstone, traces to moderate amounts of glauconite.	none

Production: oil

Core measurement conditions: routine core analysis.

Data entry: manual entry of three tables in reference.